AMENDMENTS TO THE CLAIMS

1.(currently amended): A method for connecting a fiber optic line including one or more fiber optic cables and a fiber optic receiver to a transmission line carrying an information signal propagated from a transmitter via said fiber optic receiver toward a receiver in one direction and an external synchronizing signal from said receiver toward said transmitter in an opposite direction through a common connector connecting said fiber optic receiver with said transmission line and carrying bi-directional signals, the method comprising the steps of:

transmitting a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal to said fiber optic receiver over said transmission line as an external synchronizing signal by using blanking portions of the information signals;

separating said pulse signal transmitted over the transmission line from said information signal by comparing said transmitted pulse signal to a reference signal or voltage having predetermined level; and converting said separated pulse signal into optical signal for propagating said optical signal via said one or more fiber optic cables toward said transmitter.

2.(original): A method as set forth in claim 1 and further comprising steps of:

removing said pulse signal from said information signal propagated from said transmitter toward said receiver by applying a clipping pulse commensurating with the time and duration of said pulse signal to a clipping circuit contained in said fiber optic receiver and/or said receiver and/or said transmitter, to thereby preventing closed loop signals and/or signal errors.

3. (original): A method as set forth in claim 1, wherein said information signal is a composite video signal or a digital video signal.

4. (original): A method as set forth in claim 3, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each said information signal.

5. (original): A method as set forth in claim 3, wherein said information signal is mixed with an audio signal.

6.(original): A method as set forth in claim 3, wherein said information signal contains an identification signal pertaining to said transmitter.

7. (original): A method as set forth in claim 3, wherein said information signal contains status and/or diagnostic data pertaining to said transmitter.

8. (original): A method as set forth in claim 5 wherein said information signal further contains identification signal pertaining to said transmitter.

9. (original): A method as set forth in claim 5, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

10. (original): A method as set forth in claim 8, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

11.(currently amended): A method for connecting a fiber optic line including one or more fiber optic cables and a fiber optic transmitter to a transmission line carrying an information signal from a transmitter toward a receiver via said fiber optic transmitter in one direction and an external synchronizing signal from said receiver via said fiber optic transmitter toward said transmitter in an opposite direction through a common connector connecting said fiber optic transmitter with said transmission line and carrying bi-directional signals, the method comprising the steps of:

receiving an optical signal emitted over said one or more fiber optic cables to said fiber optic transmitter as an external synchronizing signal and converting said received optical signal into a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal; and

applying said pulse signal to said transmission line for propagating said pulse signal to said transmitter as an external synchronizing signal by using blanking portions of the information signal.

12. (original): A method as set forth in claim 11 and further comprising the steps of:

removing said pulse signal from said information signal propagated from said transmitter toward said receiver by applying a clipping pulse commensurating with the time and duration of said pulse signal to a clipping circuit contained in said fiber optic transmitter and/or said receiver, and/or said transmitter, thereby preventing closed loop signal and/or signal errors.

13. (original): A method as set forth in claim 11 further comprising the steps of:

separating said pulse signal propagated over said transmission line from said information signal by comparing said bi-directional signals to a reference signal or voltage having a predetermined level; and

applying said separated pulse to said transmitter.

14. (currently amended): A method as ~~st~~ set forth in claim 11, wherein said information signal is a composite video signal or a digital video signal.

15. (original): A method as set forth in claim 11, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of information signals.

16. (original): A method as set forth in claim 14, wherein said information signal is mixed with an audio signal.

17. (original): A method as set forth in claim 14, wherein said information signal contains an identification signal pertaining to said transmitter.

18. (original): A method as set forth in claim 14, wherein said information signal contains status and/or diagnostic data pertaining to said transmitter.

19. (original): A method as set forth in claim 16, wherein said information signal further contains an identification signal pertaining to said transmitter.

20. (original): A method as set forth in claim 16, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

21. (original): A method as set forth in claim 19, wherein said information signal further contains status and/or diagnostic data pertaining said transmitter.

22.(currently amended): A method for connection fiber optic line consisting of one or more fiber optic cables and fiber optic receiver to a transmission line carrying video signal propagated from a transmitter via said fiber optic receiver toward a receiver in one direction and control signal from said receiver toward said transmitter in an opposite direction through a common connector connecting said fiber optic receiver with said transmission line and carrying bi-directional signals, the method comprising the steps of:

generating and feeding a control signal during one or more predetermined horizontal scanning periods of said video signal to said fiber optic receiver over said transmission line during a vertical blanking portion of said video signal;

separating said control signal propagated over the transmission line from said video signal by detecting an envelope of said control signal during said predetermined one or more horizontal scanning periods of said video signal; and

converting said separated control signal into an optical signal for propagating said optical signal via said one or more fiber optic cables toward said transmitter.

23. (original): A method as set forth in claim 22 and further comprising the steps of:

removing said control signal from said video signal propagated from said transmitter toward said receiver by applying a clipping pulse commensurating with said one or more predetermined horizontal scanning period of said video signal to a clipping circuit contained in said fiber optic receiver and/or said receiver and/or said transmitter, thereby preventing closed loop signal and/or signal errors.

24. (original): A method as set forth in claim 22, wherein said video signal is composite video signal or digital video signal.

25. (original): A method as set forth in claim 22, wherein said video signal is mixed with audio signal.

26. (original): A method as set forth in claim 22, wherein said video signal contains identification signal pertaining said transmitter.

27. (original): A method as set forth in claim 22, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

28. (original): A method as set forth in claim 25, wherein said video signal further contains an identification signal pertaining to said transmitter.

29. (original): A method as set forth in claim 25, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

30. (original): A method as set forth in claim 28, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

31.(currently amended): A method for connection a fiber optic line including one or more fiber optic cables and a fiber optic transmitter to a transmission line carrying a video signal from a transmitter toward a receiver via said fiber optic transmitter in one direction and a control signal from said receiver via said fiber optic transmitter toward said transmitter in an opposite direction through a common connector connecting said fiber optic transmitter with said transmission line and carrying bi-directional signals, the method comprising the steps of:

emitting optical signal through said one or more fiber optic cables to said fiber optic transmitter during one or more predetermined horizontal scanning periods of said video signal as a signal for controlling said transmitter; receiving and converting said emitted optical signal into said control signal for propagating said control signal to said transmitter by injecting said control signal to said transmission line during said one or more predetermined horizontal scanning periods of vertical blanking portions of said video signal.

32. (original): A method as set forth in claim 31 and further comprising the step of:

removing said control signal from said video signal propagated from said transmitter toward said receiver by applying a clipping pulse commensurating with said one or more predetermined horizontal scanning periods of said video signal to a clipping circuit contained in said fiber optic transmitter and/or said receiver and/or said transmitter, to thereby prevent closed loop signals and/or signal errors.

33. (original): A method as set forth in claim 31, wherein said video signal is a composite video signal or a digital video signal.

34. (original): A method as set forth in claim 33, wherein said video signal is mixed with an audio signal.

35. (original): A method as set forth in claim 33, wherein said video signal contains an identification signal pertaining to said transmitter.

36. (original): A method as set forth in claim 33, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

37. (original): A method as set forth in claim 34, wherein said video signal further contains identification signal pertaining to said transmitter.

38. (original): A method as set forth in claim 34, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

39. (original): A method as set forth in claim 38, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

40.(currently amended): A method for introducing a fiber optic line including one or more fiber optic cables terminated by a fiber optic receiver on one end and a fiber optic transmitter on the other end between first and second sections of a transmission line in combination with a receiver connected via said first section of said transmission [[lie]] line and via a first common connector to said fiber optic receiver and a transmitter connected via said second section of said transmission line and via a second common connector to said fiber optic transmitter, for propagating an information signal from said transmitter toward said receiver in one direction and an external synchronizing signal from said receiver toward said transmitter in an opposite direction, through said first and second common connectors carrying bi-directional signals, the method comprising the steps of:

transmitting a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal to said fiber optic receiver over said first section of said transmission line as an external synchronizing signal by using blanking portions of the information signals;

separating said pulse signal transmitted over said first section of said transmission line from said information signal by comparing said transmitted signal to a reference signal or voltage having predetermined level; and converting said separated pulse signal into an optical signal for emitting said optical signal via said one or more fiber optic cables toward said fiber optic transmitter;

receiving and reconverting said optical signal into a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal; and

injecting said reconverted pulse signal into said second section of said transmission line for propagating said reconverted pulse signal toward said transmitter over said transmission line as an external synchronizing signal by using blanking portions of the information signals.

41. (original): A method as set forth in claim 40, and further comprising the step of:

removing said pulse signal from said information signal propagated from said transmitter toward said receiver by applying a clipping pulse commensurating with the time and duration of said pulse signal to a clipping circuit contained in said fiber optic receiver and/or said fiber optic transmitter and/or said receiver and/or said transmitter, to thereby prevent closed loop signal and/or signal errors.

42. (original): A method as set forth in claim 40, wherein said information signal is a composite video signal or a digital video signal.

43. (original): A method as set forth in claim 42, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said information signal.

44. (original): A method as set forth in claim 42, wherein said information signal is mixed with audio signal.

45. (original): A method as set forth in claim 42, wherein said information signal contains identification signal pertaining said transmitter.

46. (original): A method as set forth in claim 42, wherein said information signal contains status and/or diagnostic data pertaining to said transmitter.

47. (original): A method as set forth in claim 44, wherein said information signal further contains an identification signal pertaining to said transmitter.

48. (original): A method as set forth in claim 44, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

49. (original): A method as set forth in claim 47, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

50. (original): A method for introducing a fiber optic line including one or more fiber optic cables terminated by a fiber optic receiver on one end and a fiber optic transmitter on the other end between first and second sections of a transmission line in combination with a receiver connected via said first section of said transmission line and via a first common connector to said fiber optic receiver and a transmitter connected via said second section of said transmission line and via a second common connector to said fiber optic transmitter for propagating a video signal from said transmitter toward said receiver in one direction and a control signal from said receiver toward said transmitter in an opposite direction, through said common connectors carrying bi-directional signals, comprising the steps of:

generating and feeding a control signal during one or more predetermined horizontal scanning periods of said video signal to said fiber optic receiver over said first section of said transmission line during a vertical blanking portion of said video signal;

separating said control signal propagated over said transmission line from said video signal by detecting an envelope of said control signal during said predetermined one or more horizontal scanning periods of said video signal;

converting said separated control signal into an optical signal for emitting said optical signal via said one or more fiber optic cables toward said fiber optic transmitter receiving said emitted optical signal; and

reconverting said emitted optical signal into said control signal for propagating said control signal to said transmitter by injecting said control signal to said transmission line during said one or more predetermined horizontal scanning periods of vertical blanking portions of said video signal.

51. (original): A method as set forth in claim 50, and further comprising the steps of:

removing said control signal from said video signal propagated from said transmitter toward said receiver by applying a clipping pulse commensurating with said one or more predetermined horizontal scanning periods of said video signal to a clipping circuit contained in said fiber optic receiver and/or said fiber optic transmitter and/or said receiver and/or said transmitter, thereby preventing closed loop signal and/or signal errors.

52. (original): A method as set forth in claim 50, wherein said video signal a is composite video signal or digital video signal.

53. (original): A method as set forth in claim 52, wherein said video signal is mixed with audio signal.

54. (original): A method as set forth in claim 52, wherein said video signal contains identification signal pertaining to said transmitter.

55. (original): A method as set forth in claim 52, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

56. (original): A method as set forth in claim 53, wherein said video signal further contains an identification signal pertaining to said transmitter.

57. (original): A method as set forth in claim 53, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

58. (original): A method as set forth in claim 56, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

59.(currently amended): A method for connecting a fiber optic line including one or more fiber optic cables and a fiber optic receiver to a transmission line carrying a video signal propagated from a transmitter via said fiber optic receiver toward a receiver in one direction and an external synchronizing along with control signals from said receiver toward said transmitter in

an opposite direction through a common connector connecting said fiber optic receiver with said transmission line and carrying bi-directional signals, the method comprising the steps of;

generating two distinct signals; of which one is a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal as said external synchronizing signal, and another is a control signal having predetermined different voltage levels distinct from those of said pulse signal level for feeding said pulse signal and said control signal to said transmission line at distinct different times;

wherein said control signal generated during one or more predetermined horizontal scanning periods of said video signal, and said pulse signal are both fed to said fiber optic receiver over said transmission line by using vertical blanking portions of said video signal;

separating said pulse signal and said control signal propagated over said transmission line from said video signal by comparing said propagated signal to a reference signal or voltage having a predetermined level and by time gating and detecting an envelope of said control signal during said predetermined one or more horizontal scanning periods of said video signal; and

converting said separated pulse signal and said separated control signal into optical signals for emitting said optical signals via said one or more fiber optic cables toward said transmitter.

60. (original): A method as set forth in claim 59 and further comprising the step of;

removing said pulse signal and said control signal from said information signal propagated from said transmitter toward said receiver by applying clipping pulses commensurating with the time and duration of said pulse signal and said control signal to one or

more clipping circuits contained in said fiber optic receiver and/or said receiver, and/or said transmitter, thereby preventing closed loop signal and/or signal errors.

61. (original): A method as set forth in claim 59, wherein said video signal is composite video signal or digital video signal.

62. (original): A method as set forth in claim 61, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signals.

63. (original): A method as set forth in claim 61, wherein said video signal is mixed with audio signal.

64. (original): A method as set forth in claim 61, wherein said video signal contains an identification signal pertaining to said transmitter.

65. (original): A method as set forth in claim 61, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

66. (original): A method as set forth in claim 63, wherein said video signal further contains an identification signal pertaining to said transmitter.

67. (original): A method as set forth in claim 63, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

68. (original): A method as set forth in claim 66, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

69.(currently amended): A method for connecting a fiber optic line including one or more fiber optic cables and a fiber optic transmitter to a transmission line carrying a video signal from a transmitter toward a receiver via said fiber optic transmitter in one direction and an external synchronizing along with control signals from said receiver via said fiber optic transmitter toward said transmitter in an opposite direction through common connector connecting said fiber optic transmitter with said transmission line and carrying bi-directional signals, comprising the steps of:

receiving an optical signals emitted over said one or more fiber optic cables to said fiber optic transmitter composed of two distinct levels and distinct time incidence, a first level and time incidence for said external synchronizing signal and second level and time incidence for said control signals; and converting a received first level and time incidence optical signal into a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal and converting a received second level and time incidence optical signal into a control signal during one or more predetermined horizontal scanning periods of said video signal; and

applying said converted pulse signal and said converted control signal to said transmission line for propagating both said pulse signal and said control signal to said transmitter as an external synchronizing signal along with said control signal by using vertical blanking portions of said video signal.

70.(original): A method as set forth in claim 69, and further comprising the steps of:

removing said pulse signal and said control signal from said video signal propagated from said transmitter toward said receiver by applying clipping pulses commensurating with the time and duration of said pulse signal and said control signal to one or more clipping circuits contained in said fiber optic transmitter and/or said receiver and/or said transmitter, to thereby prevent closed loop signal and/or signal errors.

71.(original): A method as set forth in claim 69 wherein said video signal is a composite video signal or a digital video signal.

72.(original): A method as set forth in claim 71, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signal.

73.(original): A method as set forth in claim 71, wherein said video signal is mixed with audio signal.

74.(original): A method as set forth in claim 71, wherein said video signal contains an identification signal pertaining to said transmitter.

75.(original): A method as set forth in claim 71, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

76.(original): A method as set forth in claim 73, wherein said video signal further contains an identification signal pertaining to said transmitter.

77.(original): A method as set forth in claim 73, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

78.(original): A method as set forth in claim 76, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

79.(original): A method for introducing a fiber optic line including one or more fiber optic cables terminated by a fiber optic receiver on one end and a fiber optic transmitter on the other end between first and second sections of a transmission line in combination with a receiver connected via a first section of said transmission line and via a first common connector to said fiber optic receiver and a transmitter connected via a second section of said transmission line and via a common connector to said fiber optic transmitter for propagating a video signal from said transmitter toward said receiver in one direction and external synchronizing along with control signals from said receiver toward said transmitter in the opposite direction, through said common connectors carrying bi-directional signals, comprises the steps of:

generating two distinct signals; a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal as said external synchronizing signal, and another is a control signal having a predetermined different voltage level distinct from that of said pulse signal, for feeding said pulse signal and said control signal to said first section of said transmission line at distinct

different times, wherein said control signal generated during one or more predetermined horizontal scanning periods of said video signal and said pulse signal are both fed to said fiber optic receiver over said transmission line by using vertical blanking portions of said video signal;

separating said pulse signal and said control signal propagated over said transmission line from said video signal by comparing said propagated signal to a reference signal or voltage having a predetermined level and by time gating and detecting an envelope of said control signal during said predetermined one or more horizontal scanning periods of said video signal; and

converting said separated pulse signal and said separated control signal into optical signals for emitting said optical signals via said one or more fiber optic cables toward said fiber optic transmitter;

receiving said optical signals composed of two distinct levels and distinct time incidence, first level and time incidence for said external synchronizing signal and second level and time incidence for said control signals and converting said received first level and time incidence optical signal into a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal and said second level and time incidence optical signal into said control signal during one or more predetermined horizontal scanning periods of said video signal; and

applying said converted pulse signal and said converted control signal to said transmission line for propagating both said pulse signal and said control signal to said transmitter as an external synchronizing signal along with control signal by using vertical blanking portions of the video signal;

80. (original): A method as set forth in claim 79, and further comprising the step of:

removing said pulse signal and said control signal from said video signal propagated from said transmitter toward said receiver by applying clipping pulses commensurating with the time and duration of said pulse signal and said control signal to one or more clipping circuits contained in said fiber optic receiver and/or said fiber optic transmitter and/or said receiver and/or said transmitter, to thereby prevent closed loop signals and/or signal errors.

81. (original): A method as set forth in claim 79, wherein said video signal is a composite video signal or digital video signal.

82. (original): A method as set forth in claim 81, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signals.

83. (original): A method as set forth in claim 81, wherein said video signal is mixed with audio signal.

84. (original): A method as set forth in claim 81, wherein said video signal contains identification signal pertaining to said transmitter.

85. (original): A method as set forth in claim 81, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

86. (original): A method as set forth in claim 83, wherein said video signal further contains an identification signal pertaining to said transmitter.

87. (original): A method as set forth in claim 83, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

88. (original): A method as set forth in claim 86, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

89.(currently amended): A fiber optic receiver apparatus for connecting one or more fiber optic cables and a fiber optic receiver to a transmission line carrying an information signal propagated from a transmitter via said one or more fiber optic cables and via said fiber optic receiver toward a receiver in one direction and an external synchronizing signal from said receiver toward said transmitter in an opposite direction through a common connector connecting said fiber optic receiver with said transmission line and carrying bi-directional signals, the apparatus comprising:

a circuit for receiving an optical information signal from said transmitter via said one or more fiber optic cables and for converting said optical information signal into electrical signal; and

a circuit for processing said electrical signal into said information signal and for outputting said information signal via said common connector to said transmission line;

a circuit for retrieving a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal fed from said receiver through said transmission line via said common connector as an external synchronizing signal during blanking portions of said information

signals, and for separating said pulse signal from said information signal by comparing a bi-directional signal to a reference signal or voltage having a predetermined level;

a circuit for processing said separated pulse signal; and

a circuit for converting said processed pulse signal into an optical signal for emitting said optical signal via said one or more fiber optic cables toward said transmitter.

90. (original): An apparatus as set forth in claim 89, and further comprising;

a circuit for clipping said pulse signal from said information signal fed to said common connector by applying a clipping pulse commensurating with the time and duration of said pulse signal to said clipping circuits, for preventing closed loop signals and/or signal errors from occurrence.

91. (original): An apparatus according to claim 89, wherein said information signal is a composite video signal or a digital video signal.

92. (original): An apparatus according claim 91, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said information signals.

93. (original): An apparatus according to claim 91, wherein said information signal is mixed with an audio signal.

94. (original): An apparatus according to claim 91, wherein said information signal contains an identification signal pertaining to said transmitter.

95. (original): An apparatus according to claim 91, wherein said information signal contains status and/or diagnostic data pertaining said transmitter.

96. (original): An apparatus according to claim 93, wherein said information signal further contains identification signal pertaining to said transmitter.

97. (original): An apparatus according to claim 93, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

98. (original): An apparatus according to claim 96, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

99. (currently amended): A fiber optic transmitter apparatus for connecting one or more fiber optic cables and a fiber optic transmitter to a transmission line carrying an information signal from a transmitter toward a receiver via said fiber optic transmitter and via said one or more fiber optic cables in one direction and for propagating in an opposite direction an external synchronizing signal fed from said receiver via said fiber optic cables and via said fiber optic transmitter toward said transmitter through a common connector connecting said fiber optic transmitter with said transmission line and carrying bi-directional signals, the apparatus comprising;

a circuit for receiving an information signal from said transmitter via said transmission line and via said common connector;

a circuit for converting said received information signal into an optical signal and for emitting said optical signal through said one or more fiber optic cables to said receiver;

a circuit for receiving an optical external synchronizing signal from said receiver via said one or more fiber optical cables and for converting said optical external synchronizing signal into an electrical signal and a circuit for processing said electrical signal into a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal and for feeding said pulse signal as an external synchronizing signal during blanking portions of said information signals to said transmission line via said common connector.

100. (original): An apparatus according to claim 99, and further comprising:

a clipping circuit for clipping said pulse signal from said information signal fed to said circuit for converting said received information signal by applying a clipping pulse commensurating with the time and duration of said pulse signal to said clipping circuit, for preventing closed loop signals and/or signal error from occurrence.

101. (original): An apparatus according to claim 99, wherein said information signal is a composite video signal or a digital video signal.

102. (original): An apparatus according to claim 101, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each information signal.

103. (original): An apparatus according to claim 101, wherein said information signal is mixed with an audio signal.

104. (original): An apparatus according to claim 101, wherein said information signal contains an identification signal pertaining to said transmitter.

105. (original): An apparatus according to claim 101, wherein said information signal contains status and/or diagnostic data pertaining to said transmitter.

106. (original): An apparatus according to claim 103, wherein said information signal further contains identification signal pertaining to said transmitter.

107. (original): An apparatus according to claim 103, wherein said information signal further contains status and/or diagnostic data pertaining said transmitter.

108. (original): An apparatus according to claim 106, wherein said information signal further contains status and/or diagnostic data pertaining to said transmitter.

109.(currently amended): A fiber optic receiver apparatus for connecting one or more fiber optic cables and a fiber optic receiver to a transmission line carrying a video signal propagated from a transmitter via said one or more fiber optic cables and via said fiber optic receiver toward a receiver in one direction and a control signal from said receiver toward said

transmitter in an opposite direction through a common connector connecting said fiber optic receiver with said transmission line and carrying bi-directional signals, the apparatus comprising:

a circuit for receiving an optical video signal from said transmitter via said one or more fiber optic cables and for converting said optical video signal into an electrical signal;

a circuit for processing said electrical signal into said video signal and for outputting said video signal via said common connector to said transmission line;

a circuit for retrieving said control signal generated by said receiver during one or more predetermined horizontal scanning periods of said video signal and fed to said fiber optic receiver over said transmission line through said common connector during a vertical blanking portion of said video signal and for separating said control signal propagated over the transmission line from said video signal by time gating and detecting an envelope of said control signal during said predetermined one or more horizontal scanning periods of said video signal;

a circuit for processing said separated control signal and

a circuit for converting said separated control signal into an optical signal for emitting said optical signal via said one or more fiber optic cables toward said transmitter.

110. (original): An apparatus as set forth in claim 109, and further comprising;

a circuit for clipping said control signal from said video signal fed to said common connector by applying a clipping pulse commensurating with said one or more predetermined horizontal scanning periods of said video signal to said clipping circuit, for preventing closed loop signals and/or signal errors from occurrence.

111. (original): An apparatus according to claim 109, wherein said video signal is a composite video signal or a digital video signal.

112. (original): An apparatus according to claim 111, wherein said video signal is mixed with an audio signal.

113. (original): An apparatus according to claim 111, wherein said video signal contains an identification signal pertaining to said transmitter.

114. (original): An apparatus according to claim 111, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

115. (original): An apparatus according to claim 112, wherein said video signal further contains an identification signal pertaining to said transmitter.

116. (original): An apparatus according to claim 112, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

117. (original): An apparatus according to claim 115, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

118.(currently amended): A fiber optic transmitter apparatus for connecting one or more fiber optic cables and a fiber optic transmitter to a transmission line carrying a video signal

from a transmitter toward a receiver via said fiber optic transmitter and via said one or more fiber optic cables in one direction and for propagating in an opposite direction a control signal fed from said receiver via said fiber optic cables and via said fiber optic transmitter toward said transmitter through a common connector connecting said fiber optic transmitter with said transmission line and carrying bi-directional signals, the apparatus comprising;

a circuit for receiving a video signal from said transmitter via said transmission line and via said common connector; and

a circuit for converting said received video signal into an optical signal and for emitting said optical signal through said one or more fiber optic cables to said receiver;

a circuit for receiving an optical control signal from said receiver via said one or more fiber optic cables and for converting said optical control signal into an electrical signal; and

a circuit for processing said electrical signal into said control signal during one or more predetermined horizontal periods of said video signal and for feeding said control signal during blanking portions of said video signals to said transmission line via said common connector.

119. (original): An apparatus according to claim 118, further comprising;

a circuit for clipping said control signal from said video signal fed to said circuit for converting said received video signal by applying a clipping pulse commensurating with said one or more predetermined horizontal periods of said video signal to said clipping circuit, for preventing closed loop signal and/or signal errors from occurrence.

120. (original): An apparatus according to claim 118, wherein said video signal is a composite video signal or a digital video signal.

121. (original): An apparatus according to claim 120, wherein said video signal is mixed with an audio signal.

122. (original): An apparatus according to claim 120, wherein said video signal contains an identification signal pertaining to said transmitter.

123. (original): An apparatus according to claim 120, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

124. (original): An apparatus according to claim 121, wherein said video signal further contains an identification signal pertaining to said transmitter.

125. (original): An apparatus according to claim 121, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

126. (original): An apparatus according to claim 124, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

127.(currently amended): A fiber optic receiver apparatus for connecting one or more fiber optic cables and to a fiber optic receiver to a transmission line carrying a video signal propagated from a transmitter via said one or more fiber optic cables and via said fiber optic receiver toward a receiver in one direction and external synchronizing signal along with a control

signal from said receiver toward said transmitter in the opposite direction through common connector connecting said fiber optic receiver with said transmission line and carrying bi-directional signals, comprising;

a circuit for receiving an optical video signal from said transmitter via said one or more fiber optical cables and for converting said optical video signal into an electrical signal;

a circuit for processing said electrical signal into said video signal and for outputting said video signal via said common connector to said transmission line;

a retrieving circuit for retrieving said external synchronizing signal along with said control signal generated by said receiver, wherein said external synchronizing signal is a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal and said control signal is a signal having predetermined different voltage levels distinct from those of said pulse signal level and is generated at a distinctly different time from said pulse signal and wherein said control signal is generated during one or more predetermined horizontal scanning periods of said video signal and wherein said pulse signal and said control signal are both fed to said fiber optic receiver over said transmission line during vertical blanking portions of said video signal;

wherein said retrieving circuit separating said pulse signal and said control signal from said video signal by comparing said bi-directional signals to a reference signal or voltage having a predetermined level and by time gating and detecting an envelope of said control signal during said predetermined one or more horizontal scanning periods of said video signal; and

a circuit for converting said separated pulse signal and said separated control signal into optical signals for emitting said optical signals via said one or more fiber optic cables toward said transmitter.

128. (original): An apparatus according to claim 127, and further comprising;

one or more clipping circuits for clipping said pulse signal and said control signal from said video signal fed to said common connector by applying clipping pulses commensurating with the time and duration of said pulse signal and said control signal to said one or more clipping circuits for preventing closed loop signals and/or signal errors from occurrence.

129. (original): An apparatus according to claim 127, wherein said video signal is a composite video signal or a digital video signal.

130. (original): An apparatus according to claim 129, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signals.

131. (original): An apparatus according to claim 129, wherein said video signal is mixed with an audio signal.

132. (original): An apparatus according to claim 129, wherein said video signal contains an identification signal pertaining to said transmitter.

133. (original): An apparatus according to claim 129, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

134. (original): An apparatus according to claim 131, wherein said video signal further contains an identification signal pertaining to said transmitter.

135. (original): An apparatus according to claim 131, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

136. (original): An apparatus according to claim 134, wherein said video signal further contains status and/or diagnostic data pertaining said transmitter.

137.(currently amended): A fiber optic transmitter apparatus for connecting one or more fiber optic cables and a fiber optic transmitter to a transmission line carrying a video signal from a transmitter toward a receiver via said fiber optic transmitter and via said one or more fiber optic cables in one direction and for propagating in an opposite direction an external synchronizing signal along with a control signal fed from said receiver via said fiber optic cables and via said fiber optic transmitter toward said transmitter through a common connector connecting said fiber optic transmitter with said transmission line and carrying bi-directional signals, the apparatus comprising;

a circuit for receiving a video signal from said transmitter via said transmission line and via said common connector; and

a circuit for converting said received video signal into an optical signal and for emitting said optical signal through said one or more fiber optic cables to said receiver;

a circuit for receiving an optical external synchronizing signal and control signal from said receiver via said one or more fiber optic cables said received signals being composed of two

distinct optical signals, and said receiving circuit converting said two distinct optical signals into two distinct electrical signals; and

a circuit for processing said electrical signal into two distinct signals;

wherein said external synchronizing signal is a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal and said control signal is a signal having predetermined different voltage levels distinct from said pulse signal level and is generated at distinctly different time from the said pulse signal and wherein said control signal is generated during one or more predetermined horizontal scanning periods of said video signal and wherein said circuit for processing said electrical signal feeds said pulse signal and said control signal to said transmission line via said common connector during vertical blanking portions of said video signal.

138. (original): An apparatus as set forth in claim 137 and further comprising:

one or more clipping circuits for clipping said external synchronizing signal said and said control signal from said video signal fed to said circuit for converting said received video signal by applying clipping pulses commensurating with the time and duration of said pulse signal and said control signal to said one or more clipping circuits for preventing closed loop signals and/or signal errors from occurrence.

139. (original): An apparatus according to claim 137, wherein said video signal is a composite video signal or a digital video signal.

140. (original): An apparatus according to claim 139, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signals.

141. (original): An apparatus according to claim 139, wherein said video signal is mixed with an audio signal.

142. (original): An apparatus according to claim 139, wherein said video signal contains an identification signal pertaining to said transmitter.

143. (original): An apparatus according to claim 139, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

144. (original): An apparatus according to claim 141, wherein said video signal further contains identification signal pertaining said transmitter.

145. (original): An apparatus according to claim 141, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

146. (original): An apparatus according to claim 144, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

147. (original): A fiber optic system connecting apparatus comprising:

a fiber optic receiver;

a fiber optic transmitter; and

one or more fiber optic cables connected to said fiber optic receiver on one end and to said fiber optic transmitter on the other end for connecting a fiber optic system to first and second sections of a transmission line in combination with a receiver connected via a first section of said transmission line and via a first common connector to said fiber optic receiver and a transmitter connected via a second section of said transmission line and via a second common connector to said fiber optic transmitter for propagating an information signal from said transmitter toward said receiver in one direction and an external synchronizing signal from said receiver toward said transmitter in the opposite direction, through said first and second common connectors carrying bi-directional signals;

a fiber optic transmitter including:

a circuit for receiving an information signal from said transmitter via said second section of said transmission line and via said common connector; and

a circuit for converting said received information signal into optical signal and for emitting said optical signal through said one or more fiber optic cables to said fiber optic receiver;

a circuit for receiving optical external synchronizing signal from said fiber optic receiver via said one or more fiber optic cables and for converting said optical external synchronizing signal into an electrical signal; and

a circuit for processing said electrical signal into a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal and for feeding said pulse signal as an external

synchronizing signal during blanking portions of said information signal to said second section of said transmission line via said second common connector;

said fiber optic receiver including:

a circuit for receiving an optical information signal from said fiber optic transmitter via said one or more fiber optic cables and for converting said optical information signal into an electrical signal;

a circuit for processing said electrical signal into said information signal and for outputting said information signal via first said common connector to said first section of said transmission line;

a circuit for retrieving a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal fed from said receiver through said first section of said transmission line via first said common connector as an external synchronizing signal during blanking portions of said information signal, and for separating said pulse signal from said information signal by comparing said bi-directional signal to a reference signal or voltage having predetermined level;

a circuit for processing said separated pulse signal and a circuit for converting said processed pulse signal into optical signal for emitting said optical signal via said one or more fiber optic cables toward said fiber optic transmitter.

148. (original): An apparatus according to claim 147, further comprising:

one or more circuits for clipping said pulse signal from said information signal processed by said fiber optic transmitter and/or by said fiber optic receiver by applying a clipping pulse

commensurating with the time and duration of said pulse signal to said one or more circuits for clipping for preventing closed loop signals and/or signal errors from occurrence.

149. (original): An apparatus according to claim 147, wherein said information signal is a composite video signal or a digital video signal.

150. (original): An apparatus according to claim 149, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each information signal.

151. (original): An apparatus according to claim 149, wherein said information signal is mixed with an audio signal.

152. (original): An apparatus according to claim 149, wherein said information signal contains an identification signal pertaining to said transmitter.

153. (original): An apparatus according to claim 149, wherein said information signal contains status and/or diagnostic data pertaining to said transmitter.

154. (original): An apparatus according to claim 151, wherein said information signal further contains an identification signal pertaining to said transmitter.

155. (original): An apparatus according to claim 151, wherein said information signal further contains status and/or diagnostic data pertaining said transmitter.

156. (original): An apparatus according to claim 154, wherein said information signal further contains status and/or diagnostic data pertaining said transmitter.

157. (original): A fiber optic system connecting apparatus comprising a fiber optic receiver, a fiber optic transmitter and one or more fiber optic cables to be connected to said fiber optic receiver on one end and to said fiber optic transmitter on the other end for connecting said fiber optic system to first and second sections of a transmission line in combination with a receiver connected via a first section of said transmission line and via a first common connector to said fiber optic receiver and a transmitter connected via a second section for said transmission line and via a second common connector to said fiber optic transmitter for propagating a video signal from said transmitter toward said receiver in one direction and a control signal from said receiver toward said transmitter in an opposite direction, through said first and second common connectors carrying bi-directional signals,

said fiber optic transmitter including:

a circuit for receiving a video signal from said transmitter via said second section of said transmission line and via said second common connector;

a circuit for converting said received video signal into an optical signal and for emitting said optical signal through said one or more fiber optic cables to said fiber optic receiver;

a circuit for receiving optical control signal from said fiber optic receiver via said one or more fiber optic cables and for converting said optical control signal into electrical signal; and

a circuit for processing said electrical signal into said control signal during one or more predetermined horizontal periods of said video signal and for feeding said pulse signal as an

external synchronizing signal during blanking portions of said information signals to said second of said transmission line via said second common connector;

said fiber optic receiver including:

a circuit for receiving an optical video signal from said fiber optic transmitter via said one or more fiber optic cables and or converting said optical video signal into an electrical signal;

a circuit for processing said electrical signal into said video signal and for outputting said video signal via said first common connector to said first section of said transmission line;

a circuit for retrieving said control signal generated by said receiver during one or more predetermined horizontal scanning periods of said video signal and fed to said fiber optic receiver through said first section for said transmission line via said first common connector during the vertical blanking portion of said video signal and for separating said control signal propagated over the transmission line from said video signal by time gating and detecting an envelope of said control signal during said predetermined one or more horizontal scanning periods of said video signal;

a circuit for processing said separated control signal; and

a circuit for converting said processed control signal into optical signal for emitting said optical signal via said one or more fiber optic cables toward said fiber optic transmitter.

158.(currently amended): An apparatus according to ~~claim 157~~ claim 157, further comprising;

one or more clipping circuits for clipping said control signal from said video signal processed by said fiber optic transmitter and/or by said fiber optic receiver by applying a clipping pulse commensurating with said one or more predetermined horizontal periods of said

video signal to said one or more clipping circuits for preventing closed loop signal and/or signal errors from occurrence.

159. (original): An apparatus according to claim 157, wherein said video signal is a composite video signal or a digital video signal.

160. (original): An apparatus according to claim 159, wherein said video signal is mixed with an audio signal.

161. (original): An apparatus according to claim 159, wherein said video signal contains an identification signal pertaining to said transmitter.

162. (original): An apparatus according to claim 159, wherein said video signal contains status and/or diagnostic data pertaining to said transmitter.

163. (original): An apparatus according to claim 160, wherein said video signal further contains an identification signal pertaining to said transmitter.

164. (original): An apparatus according to claim 160, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

165. (original): An apparatus according to claim 163, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

166. (original): A fiber optic system connecting apparatus comprising a fiber optic receiver; a fiber optic transmitter one or more fiber optic cables to be connected to said fiber optic receiver on one end and to a fiber optic transmitter on the other end for connecting said fiver optic system to first and second sections of a transmission line in combination with a receiver connected via said first section of said transmission line and via common connector to said fiber optic receiver and a transmitter connected via said second section of said transmission line and via common connector to said fiber optic transmitter for propagating video signal from said transmitter toward said receiver in one direction and an external synchronizing signal along with a control signal from said receiver toward said transmitter in an opposite direction, through said first and second common connectors carrying bi-directional signals,

said fiber optic transmitter including:

a circuit for receiving a video signal from said transmitter via said second section of said transmission line and via said second common connector;

a circuit for converting said received video signal into an optical signal and for emitting said optical signal through said one or more fiber optic cables to said fiber optic receiver;

a circuit for receiving an optical external synchronizing signal and a control signal as two distinct optical signals from said fiber optic receiver via said one or more fiber optic cables and for converting said two distinct optical signals into two distinct electrical signals and a circuit for processing said electrical signals into two distinct signals; wherein said external synchronizing signal is a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal and said control signal is a signal having predetermined different voltage levels distinct from those of said pulse signal level

and is generated at distinctly different time from said pulse signal and wherein said control signal is generated during one or more predetermined horizontal scanning periods of said video signal and wherein said circuit for processing said electrical signal feeds said pulse signal and said control signal to said second section of said transmission line via said common connector during vertical blanking portions of said video signal;

said fiber optic receiver including:

a circuit for receiving an optical video signal from said fiber optic transmitter via said one or more fiber optic cables and for converting said optical video signal into an electrical signal;

a circuit for processing said electrical signal into said video signal and for outputting said video signal via said first common connector to said first section of said transmission line; and

a retrieving circuit for retrieving said external synchronizing signal and said control signal generated by said receiver compose as two distinct signals, wherein, said external synchronizing signal is a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal and said control signal is a signal having predetermined different voltage levels distinct from the level of said pulse signal and is generated at distinctly different time from that of said pulse signal and wherein said control signal is generated during one or more predetermined horizontal scanning periods of said video signal and wherein said pulse signal and said control signal are both fed to said fiber optic receiver over said first section of said transmission line during vertical blanking portions of said video signal;

wherein said retrieving circuit separates said pulse signal and said control signal from said video signal by comparing said bi-directional signals to a reference signal or voltage having

predetermined level and by time gating and detecting the envelope of said control signal during said predetermined one or more horizontal scanning periods of said video signal; and

a circuit converting said separated pulse signal and said separated control signal into optical signals for emitting said optical signals via said one or more fiber optic cables toward said fiber optic transmitter.

167. (original): An apparatus according to claim 166, and further comprising:

one or more clipping circuits for clipping said pulse signal and said control signal from said video signal processed by said fiber optic transmitter and/or by said fiber optic receiver by applying clipping pulses commensurating with the time and duration of said pulse signal and said control signal to said one or more clipping circuits for preventing closed loop signals and/or signal errors from occurrence.

168. (original): An apparatus according to claim 166, wherein said video signal is composite video signal or digital video signal.

169. (original): An apparatus according to claim 168, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signals.

170. (original): An apparatus according to claim 168, wherein said video signal is mixed with an audio signal.

171. (original): An apparatus according to claim 168, wherein said video signal contains identification signal pertaining to said transmitter.

172. (original): An apparatus according to claim 168, wherein said video signal contains status and/or diagnostic data pertaining said transmitter.

173. (original): An apparatus according to claim 170, wherein said video signal further contains identification signal pertaining said transmitter.

174. (original): An apparatus according to claim 170, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

175. (original): An apparatus according to claim 173, wherein said video signal further contains status and/or diagnostic data pertaining to said transmitter.

176. (original): An apparatus according to claim 89, wherein said transmitter is a television camera, and further comprising:

a circuit for processing a video signal generated by said television camera and a circuit for converting said processed video signal into an optical signal and for emitting said optical signal through said one or more fiber optic cables to said fiber optic receiver;

a circuit for receiving an optical external synchronizing signal from said fiber optic receiver via said one or more fiber optic cables and for converting said optical external synchronizing signal into an electrical signal, and a circuit for processing said electrical signal

into a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal and for applying said pulse signal as an external synchronizing signal to said television camera during blanking portions of said information signals.

177. (original): An apparatus according to claim 176, wherein said video signal is composite video signal or digital video signal.

178. (original): An apparatus according to claim 177, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signals.

179. (original): An apparatus according to claim 177, wherein said television camera includes a circuit for injecting an audio signal and the video signal is mixed with said audio signal.

180. (original): An apparatus according to claim 177, wherein said television camera includes a circuit for injecting an identification signal and said video signal contains an identification signal pertaining to said television camera.

181. (original): An apparatus according to claim 180, wherein said circuit for injecting the identification signal is used for injecting status and/or diagnostic data signals pertaining to said television camera and said video signal contains status and/or diagnostic data pertaining to said television camera.

182. (original): An apparatus according to claim 179, wherein said television camera includes a circuit for injecting identification code signals and said video signal further contains an identification signal pertaining to said television camera.

183. (original): An apparatus according to claim 181, wherein said television camera includes a circuit for injecting an audio signal and said video signal is mixed with the audio signal.

184. (original): An apparatus according to claim 183, wherein said video signal further contains identification and/or status and/or diagnostic data pertaining said television camera.

185. (original): A transmitter apparatus according to claim 109, wherein said transmitter is a television camera, further comprising;

a circuit for processing a video signal generated by said television camera and a circuit for converting said processed video signal into optical signal and for emitting said optical signal through said one or more fiber optic cables to said fiber receiver;

a circuit for receiving an optical control signal from said fiber optic receiver via said one or more fiber optic cables and for converting said optical control signal into an electrical signal; and

a circuit for processing said electrical signal into said control signal during one or more predetermined horizontal periods of said video signal and for applying said control signal to said television camera during blanking portions of said video signal.

186. (original): An apparatus according to claim 185, wherein said video signal is a composite video signal or a digital video signal.

187. (original): An apparatus according to claim 186, wherein said television camera incorporates a circuit for injecting an audio signal and said video signal is mixed with the audio signal.

188. (original): An apparatus according to claim 186, where said television camera includes a circuit for injecting an identification signal and said video signal contains and identification signal pertaining to said television camera.

189. (original): An apparatus according to claim 188, wherein said circuit for injecting the identification signal is used for injecting status and/or diagnostic data signals pertaining to said television camera and said video signal contains status and/or diagnostic data pertaining to said television camera.

190. (original): An apparatus according to claim 187, wherein said television camera incorporate a circuit for injecting identification code signals and said video signal further contains an identification signal pertaining to said television camera.

191. (original): An apparatus according to claim 189, wherein said television camera incorporates a circuit for injecting an audio signal and said video signal is mixed with said audio signal.

192. (original): An apparatus according to claim 191, wherein said video signal further contains identification and/or status and/or diagnostic data pertaining to said television camera.

193. (original): An apparatus according to claim 127, wherein said transmitter is a television camera, further comprising;

a circuit for processing a video signal generated by said television camera and a circuit for converting said processed video signal into an optical signal and for emitting said optical signal through said one or more fiber optic cables to said fiber optic receiver;

a circuit for receiving an optical external synchronizing signal and a control signal from said fiber optic receiver via said one or more fiber optic cables as two distinct optical signals and for converting said two distinct optical signals into two distinct electrical signals and a circuit for processing said electrical signals into two distinct signals; wherein said external synchronizing signal is a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal and said control signal is a signal having predetermined different voltage levels distinct from said pulse of signal level and is generated at distinctly different time from that of said pulse signal and wherein said control signal is generated during one or more predetermined horizontal scanning periods of said video

signal for applying said pulse signal and said control signal to said television camera during vertical blanking portions of said video signal.

194. (original): An apparatus according to claim 193, wherein said video signal is composite video signal or digital video signal.

195. (original): An apparatus according to claim 194, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signals.

196. (original): An apparatus according to claim 194, wherein said television camera includes a circuit for injecting an audio signal and said video signal is mixed with said audio signal.

197. (original): An apparatus according to claim 194, wherein said television camera includes a circuit for injecting an identification signal and said video signal contains an identification signal pertaining to said television camera.

198. (original): An apparatus according to claim 194, wherein said circuit for injecting the identification signal is used for injecting status and/or diagnostic data signals pertaining to said television camera and said video signal contains status and/or diagnostic data pertaining to said television camera.

199. (original): An apparatus according to claim 196, wherein said television camera including a circuit for injecting identification code signals and said video signal further contains an identification signal pertaining to said television camera.

200. (original): An apparatus according to claim 198, wherein said television camera includes a circuit for injecting an audio signal and said video signal is mixed with audio signal.

201. (original): An apparatus according to claim 200, wherein said video signal further contains identification and/or status and/or diagnostic data pertaining to said television camera.

202. (original): A receiver apparatus according to claim 99, wherein said receiver further comprising;

a circuit for receiving an optical information signal from said fiber optic transmitter or from said transmitter via said one or more fiber optic cables and for converting said optical information signal into an electrical signal and a circuit for processing said electrical signal into said information signal and for outputting said information signal;

a circuit for generating a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal as an external synchronizing signal during blanking portions of said information signal;

a circuit for processing said pulse signal and a circuit for converting said processed pulse signal into an optical signal for emitting said optical signal via said one or more fiber optic cables toward said fiber optic transmitter or toward said transmitter during blanking portions of said information signal.

203.(currently amended): An apparatus according to ~~claim 202~~ claim 202, and further comprising;

a clipping circuit for clipping said pulse signal from said information signal fed by said transmitter or by said fiber optic transmitter by applying clipping pulses commensurating with the time and duration of said pulse signal to said clipping circuit for preventing closed loop signal and/or signal errors from occurrence.

204. (original): An apparatus according to claim 202, wherein said information signal is composite video signal or digital video signal.

205. (original): An apparatus according to claim 204, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said information signal.

206. (original): An apparatus according to claim 204, wherein said information signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.

207. (original): An apparatus according to claim 118, wherein said receiver further comprises:

a circuit for receiving an optical video signal from said fiber optic transmitter or from a television camera via said one or more fiber optic cable and for converting said optical video signal into an electrical signal and a circuit for processing said electrical signal into a video signal and for outputting said video signal;

a circuit for generating a control signal during one or more predetermined horizontal scanning periods of said video signal;

a circuit for processing said control signal; and

a circuit for converting said processed control signal into an optical signal for emitting said optical signal via said one or more fiber optic cables toward said fiber optic transmitter or toward said television camera during the vertical blanking period of said video signal.

208. (currently amended ): An apparatus according to claim 207, and further comprising:

a clipping circuit for clipping said control signal from said video signal fed by said transmitter of by said fiber optic transmitter by applying a clipping pulse commensurating with said one or more predetermined horizontal periods of said video signal to said clipping circuit for preventing closed loop signal and/or signal errors.

209. (original): An apparatus according to claim 207, wherein said video signal is a composite video signal or digital video signal.

210. (original): An apparatus according to claim 209, wherein said video signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.

211. (original): An apparatus according to claim 209, wherein said video signal contains an identification signal pertaining to said transmitter and said receiver further comprises a circuit for retrieving said identification signal.

212. (original): An apparatus according to claim 211, wherein said circuit for generating a control signal generates a mixed control signal by combining said retrieved identification signal with said control signal.

213. (original): An apparatus according to claim 212, wherein said video signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.

214. (original): An apparatus according to claim 137, wherein said receiver further comprises;

a circuit for receiving an optical video signal from said fiber optic transmitter or from a television camera via said one or more fiber optic cables and for converting said optical video signal into electrical signal and a circuit for processing said electrical signal into video signal and for outputting said video signal;

a circuit for generating said external synchronizing signal along with said control signal wherein said external synchronizing signal is a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal and said control signal is a signal having predetermined different voltage levels distinct from said pulse signal level and is generated at distinctly different time from said pulse signal and wherein said control signal is generated during one or more predetermined horizontal scanning periods of said video signal and wherein said pulse signal and said control signal are generated during vertical blanking portions of said video signal; and

a circuit converting said pulse signal and said control signal into optical signals for emitting said optical signals via said one or more fiber optic cables toward said fiber optic transmitter or toward said television camera during the vertical blanking portions of said video signal.

215. (original): An apparatus according to claim 214, and further comprising:

one or more clipping circuits for clipping said pulse signal and said control signal from said video signal fed by said transmitter or by said fiber optic transmitter by applying clipping pulses commensurating with the time and duration of said pulse signal and said control signal to said one or more clipping circuits for preventing closed loop signal and/or signal errors from occurrence.

216. (original): An apparatus according to claim 214, wherein said video signal is a composite video signal or a digital video signal.

217. (original): An apparatus according to claim 216, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signal.

218. (original): An apparatus according to claim 216, wherein said video signal is mixed with audio signal and said receiver further comprising an audio retrieving circuit for outputting said audio signal.

219. (original): An apparatus according to claim 216, wherein said video signal contains identification signal pertaining said transmitter and said receiver further comprises a circuit for retrieving said identification.

220. (original): An apparatus according to claim 219, wherein said circuit for generating a control signal generates a mixed control signal by combining said retrieved identification signal with said control signal.

221. (original): An apparatus according to claim 220, wherein said video signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.

222. (original): A receiver apparatus for connecting a plurality of transmitters through common connectors which are included in an information signal transmission system for propagating an information signal toward a receiver in one direction and an external synchronizing signal toward said transmitters in an opposite direction via transmission lines

and/or fiber optic cables through fiber optic receivers and/or fiber optic transmitters and/or directly to said transmitters in combination with a selector for selectively connecting any one of information signals and/or for switching over from one of said information signals to another, the apparatus comprising;

a circuit for generating a pulse signal having a voltage level higher than a maximum voltage level of said information signal or lower than a minimum voltage level of said information signal as an external synchronizing signal during blanking portions of said information signals;

a selector circuit having plurality of input poles for receiving plurality of information signals from said plurality of transmitter and for selectively outputting an information signal;

one or more common connectors associated with said transmission lines each for connecting one of said fiber optic receivers or said transmitters to one of said input poles and/or one or more fiber optic connectors each for connecting one of said fiber optic transmitters or said transmitters to one of said input poles, wherein each of said fiber optic connectors provides for connecting one or more fiber optic cables;

a circuit for receiving an optical information signal from said fiber optic transmitter or from said transmitters via said one or more fiber optic cables and for converting said optical information signal into an electrical signal;

a circuit for processing said electrical signal into said information signal and for outputting said information signal to an input pole of said selector circuit;

a circuit for processing said pulse signal; and

a circuit for converting said processed pulse signal into optical signal for emitting said optical signal via said one or more fiber optic cables toward said fiber optic transmitter or toward said transmitter during blanking portions of said information signal; and

a circuit for feeding said pulse signal to said one or more transmission lines for propagating said external synchronizing signal toward said fiber optic receiver and/or toward said transmitter during blanking portions of said information signal.

223. (original): An apparatus according to claim 222, and further comprising;

a clipping circuit for clipping said pulse signal from said information signal outputted from said selection circuit by applying clipping pulse commensurating with the time and duration of said pulse signal to said clipping circuit for preventing closed loop signal and/or signal error.

224. (original): An apparatus according to claim 222, wherein said information signal is composite video signal or digital video signal.

225. (original): An apparatus according to claim 224, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said information signals.

226. (original): An apparatus according to claim 224, wherein said information signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.

227. (original): A receiver apparatus for connecting a plurality of transmitters through common connectors which are included in a video signal transmission system for propagating a video signal toward a receiver in one direction and a control signal toward said transmitters in an opposite direction via transmission lines and/or fiber optic cables via fiber optic receivers and/or fiber optic transmitters and/or directly to said transmitters in combination with a selector for selectively connecting any one of video signals or for switching over from one of said video signals to another, the apparatus comprising;

a circuit for generating a control signal during one or more predetermined horizontal scanning periods of said video signal;

a selector circuit having a plurality of input poles for receiving a plurality of video signals from said plurality of transmitters and for selectively outputting said video signal;

one or more common connectors associated with said transmission lines each for connecting one of said fiber optic receivers or said transmitters to one of said input pole; and/or one or more plurality of fiber optic connectors each for connecting one of said fiber optic transmitters or said transmitters to one of said input poles; wherein each of said fiber optic connectors provides for connecting one or more fiber optic cables;

a circuit for receiving an optical video signal from one of said fiber optic transmitters or from one of said transmitters via said one or more fiber optic cables and for converting said optical video signal into an electrical signal and a circuit for processing said electrical signal into said video signal and for outputting said video signal to an input pole of said selector circuit;

a circuit for processing said control signal;

a circuit for converting said processed control signal into an optical signal for emitting said optical signal via said one or more fiber optic cables toward said fiber optic transmitter or toward said transmitter during a vertical blanking period of said video signal; and

a circuit for feeding said control signal to said one or more transmission lines for propagating said control signal toward fiber optic receiver and/or said transmitters during the vertical blanking period of said video signal.

228. (original): An apparatus according to claim 227, and further comprising:

a clipping circuit for clipping said control signal from said video signal outputted from said selection circuit by applying clipping pulses commensurating with said one or more predetermined horizontal periods of said video signal to said clipping circuit for preventing closed loop signals and/or signal errors from occurrence.

229. (original): An apparatus according to claim 227, wherein said video signal is a composite video signal or a digital video signal.

230. (original): An apparatus according to claim 229, wherein said video signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.

231. (original): An apparatus according to claim 209, wherein said video signal contains an identification signal pertaining to a respective transmitter and said receiver further comprises a circuit for retrieving said identification signal.

232. (original): An apparatus according to claim 231, wherein said circuit for generating a control signal generates a mixed control signal by combining said retrieved identification signal with said control signal.

233. (original): An apparatus according to claim 232, wherein said video signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.

234. (original): A receiver apparatus for connecting a plurality of transmitters through common connectors which are included in a video signal transmission system for propagating video signals toward a receiver in one direction and an external synchronizing signal and a control signal toward said transmitters in an opposite direction via transmission lines and/or fiber optic cables via fiber optic receivers and/or fiber optic transmitters and/or directly to said transmitters in combination with a selector for selectively connecting any one of said video signals and/or for switching over from one of said video signals to another, the apparatus comprising:

a circuit for generating a pulse signal having a voltage level higher than a maximum voltage level of said video signal or lower than a minimum voltage level of said video signal as an external synchronizing signal during blanking portions of said video signal;

a circuit for generating a control signal during one or more predetermined horizontal scanning periods of said video signal;

a selector circuit having a plurality of input poles for receiving a plurality of video signals from said plurality of transmitters and for selectively outputting a video signal;

one or more common connectors associated with said transmission lines each for connecting one of said fiber optic receivers or said transmitters to one of said input poles and/or one or more fiber optic connectors each for connecting one of said fiber optic transmitters or said transmitters to one of said input poles; wherein each of said fiber optic connectors provides for connecting one or more fiber optic cables;

a circuit for receiving an optical video signal from one of said fiber optic transmitters or from said transmitters via said one or more fiber optic cables and for converting said optical video signal into an electrical signal;

a circuit for processing said electrical signal into said video signal and for outputting said video signal to an input pole of said selector circuit;

a circuit for processing said pulse signal and said control signal;

a circuit for converting said processed pulse and control signals into optical signals for emitting said optical signals via said one or more fiber optic cables toward said fiber optic transmitter or toward said transmitter during vertical blanking portions of said video signals; and

one or more circuits for feeding said pulse signal and said control signal to said one or more transmission lines for propagating said external synchronizing signal and said control signal toward said transmitters and/or toward said fiber optic receivers during vertical blanking portions of said video signal.

235. (original): An apparatus according to claim 234, and further comprising:

one or more clipping circuits for clipping said pulse signal and said control signal from said video signal outputted from said selection circuit by applying clipping pulses commensurating with the time and duration of said pulse signal and said control signal to said one or more clipping circuits for preventing closed loop signals and/or signal errors from occurrence.

236. (original): An apparatus according to claim 234, wherein said video signal is a composite video signal or a digital video signal.

237. (original): An apparatus according to claim 236, wherein said pulse signal is opposite in polarity to an internal sync signal which is contained in each of said video signals.

238. (original): An apparatus according to claim 236, wherein said video signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.

239. (original): An apparatus according to claim 236, wherein said video signal contains an identification signal pertaining to a respective transmitter and said receiver further comprises a circuit for retrieving said identification signal.

240. (original): An apparatus according to claim 239, wherein said circuit for generating a control signal generates a mixed control signal by combining said retrieved identification signal with said control signal.

241. (original): An apparatus according to claim 240, wherein said video signal is mixed with an audio signal and said receiver further comprises an audio retrieving circuit for outputting said audio signal.